

**Aumictech**

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Data Sheet

August 14, 2026

ADVANTEST

Advantest TR5822 Universal counter

Advantest TR5822 Universal Counter 1 MHz to 120 MHz with Interface Options The Advantest TR5822 shares the TR5821 120 MHz universal counter architecture and adds a factory choice of built-in GPIB, BCD output, or D/A converter. OEM catalog lists the same 1 MHz to 120 MHz frequency, 20 ns to 1000 s period, and 200 ns to 1000 s time interval tables with mass less than 4 kg. Automated frequency and time interval measurements in ATE using GPIB or BCD, or analog recording via D/A with the TR1644. Same 120 MHz reciprocal/direct architecture as TR5821 The Advantest TR5822 shares the TR5821 120 MHz universal counter architecture and adds a factory choice of built-in GPIB, BCD output, or D/A converter. OEM catalog lists the same 1 MHz to 120 MHz frequency, 20 ns to 1000 s period, and 200 ns to 1000 s time interval tables with mass less than 4 kg. Automated frequency and time interval measurements in ATE using GPIB or BCD, or analog recording via D/A with the TR1644. Same 120 MHz reciprocal/direct architecture as TR5821 IEEE 488 1978 GPIB functions SH1 AH1 T5 L4



MODEL

Advantest TR5822

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

TR5822

LISTING

<https://aumictechlabs.com/products/tr5822-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Advantest TR5822 is a universal counter engineered for precision frequency and time interval measurements across telecommunications, research, and production test environments. It delivers dual-channel measurement capability with frequencies from 1 MHz to 120 MHz via reciprocal and direct counting methods, time intervals from 200 ns to 1000 s, and period

measurements from 20 ns to 1000 s. The instrument combines high-resolution data acquisition with a fast 0.05 s measurement throughput and exceptional time base stability of $\pm 1 \times 10^{-7}$ over 0°C to +40°C.

Technical Specifications

Frequency Measurement Channel 1: 10 Hz to 120 MHz (direct method) Channel 2: 1000 Hz to 50 MHz Reciprocal counting method: 1 mHz to 50 MHz (INPUT B) Overall range: 1 mHz to 120 MHz

Time & Period Measurement Time interval: 200 ns to 1000 s Period: 20 ns to 1000 s

Input Characteristics Channel 1 sensitivity: 25 mV; input impedance: 1 Ω ; coupling: AC/DC Channel 2 sensitivity: 25 mV; input impedance: 50 Ω ; coupling: AC/DC

Frequency ratio and totalization: DC to 50 MHz

Stability & Performance Time base stability: ± 0.0000005 /month (standard); $\pm 1 \times 10^{-7}$ (0°C to +40°C) Measurement throughput: 0.05 s

Key Features Reciprocal and direct counting methods for extended frequency range coverage Autotriggering capability for automated signal detection Masking and burst signal measurement functions Offset measurement capability Self-check function for instrument validation Integrated cooling fan with front and rear air vents (minimum 10 cm clearance recommended)

Interfaces & Integration Built-in GPIB interface for remote control and data transfer BCD output for digital integration D/A converter output option Compatible with TR1644

Calculation Unit for advanced data processing, GO-NO GO decisions, scaling, and custom calculations

Operating Environment Temperature range: 0°C to +40°C Horizontal operation required; horizontal storage recommended Vertical storage/transport requires stability measures

TR5822 Characteristics / Specifications

PARAMETER	VALUE
Model	TR5822
Mass	less than 4 kg
GPiB Option Code	5822-GP IEEE 488 1978
BCD Option Code	5822-BCD 50 pin TTL
DA Option Code	5822-DA 0.999 V fs plus or minus 0.2 percent of fs
InputAFrequency Range	10 Hz to 120 MHz direct counting
InputBFrequency Range	1 mHz to 50 MHz reciprocal
Period Range Input B	20 ns to 1000 s
Time Interval RangeAto B	200 ns to 1000 s 100 ns time unit
Frequency Ratio Range	DC to 50 MHz
Totalize Range	DC to 50 MHz capacity 0 to 99999999
InputABSensitivity DC to 100 MHz	25 mVrms
InputABSensitivity 100 to 120 MHz	55 mVrms
Input Voltage Range X	25 mVrms to 500 mVrms
Input Impedance	approx 1 MOhm / 30 pF COMAapprox 500 kOhm
Destructive Input X1 DC to 100 kHz	100 Vrms
Destructive Input X1 100 kHz to 120 MHz	5 Vrms
Coupling	DC AC AUTO AC coupled
Pulse Resolution	10 ns
Trigger Level	approx plus or minus 1 V plus AUTO half peak
Masking Time	approx 0.1 ms to 0.1 s
Noise Rejection	100 kHz lowpass filter
Time Base Frequency	10 MHz
Aging Rate	plus or minus 5e-7 per month
Temperature Stability 0 to 40 C	plus or minus 5e-6

PARAMETER	VALUE
Time Base Output	10 MHz 1 to 2 Vp-p approx 500 ohm
External Time Base	10 MHz 1 to 2 Vp-p approx 500 ohm
Display	8 digit 7 segment green LED
Sampling Rate	50 ms or HOLD
Power Consumption	less than 40 VA
Dimensions	approx 240 W x 88 H x 280 D mm
Operating Temperature	0 to plus 40 C 85 percent RH max
Storage Temperature	minus 20 to plus 70 C

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Storage temperature	minus 20 to plus 70 C
Operating temperature	0 to plus 40 C 85 percent RH max
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Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
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Notes
From Advantest TR5821/5822/5823 catalog. Only one interface type is built in. Confirm 5822-GP versus BCD versus DA on the rear panel.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

788 S 500 E, Pleasant Grove, UT 84062
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<https://aumictechlabs.com>

NIST-traceable calibration · SAM registered ·
30-day returns
NAICS 423690 · 811210 · 541380
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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.